K041168

## AUG - 2 2004

# 510(K) SUMMARY OF SAFETY AND EFFECTIVENESS

In accordance with the Food and Drug Administration Rule to implement provisions of the Safe Medical Devices Act of 1990 and in conformance with 21 CRF 807, this information serves as a Summary of Safety and Effectiveness for the use of ALLOMATRIX® Putty.

Submitted By:

Wright Medical Technology, Inc.

Date:

May 3, 2004

Contact Person:

Roger D. Brown

Sr. Director, Clinical, Regulatory & Reimbursement

Proprietary Name:

ALLOMATRIX® Putty

Common Name:

Bone Void Filler

Classification Name and Reference:

Filler, Calcium Sulfate Preformed Pellets - Class II.

888.3045

Device Product Code and Panel Code:

Orthopedics/MQV

### **DEVICE INFORMATION**

#### A. INTENDED USE

ALLOMATRIX® Putty is indicated only for bony voids or gaps that are not intrinsic to the stability of the bony structure. ALLOMATRIX® Putty is intended to be gently packed into bony voids or gaps of the skeletal system (i.e., the extremities and pelvis). These defects may be surgically created osseous defects or osseous defects created from traumatic injury to the bone.

#### B. DEVICE DESCRIPTION

ALLOMATRIX® Putty is a combination of Human Demineralized Bone Matrix (DBM) with a binding medium of calcium sulfate and carboxymethylcellulose.

ALLOMATRIX® Putty comes in the form of a kit with a premeasured powder, premeasured mixing solution, and the tools necessary to mix the components. After the powder is hydrated using all the mixing solution supplied in the kit, the resultant putty can then be handled and placed in the appropriate bone voids. This product is supplied sterile for single patient use.

### C. SUBSTANTIAL EQUIVALENCE INFORMATION

ALLOMATRIX® Putty was found to be substantially equivalent to the predicate device. The safety and effectiveness of ALLOMATRIX® Putty is adequately supported by the substantial equivalence information and testing results provided within this Premarket Notification.

#### Osteoinductivity Potential

Each lot of DBM incorporated into ALLOMATRIX® Putty is assayed *in vitro* for a native protein as a surrogate test marker for osteoinductive potential.¹ Results from this immunoassay were correlated to the athymic rat model for the DBM alone and the ALLOMATRIX Putty.² Testing each lot of DBM with this immunoassay assures that only DBM with osteoinductivity potential is used in the ALLOMATRIX® Putty. Additionally, the DBM native protein *in vitro* assay correlation with the ALLOMATRIX® Putty predicts the osteoinductive potential of the ALLOMATRIX® Putty in the athymic rat model. Although only one native protein is used as the test marker, it is the combination of various proteins in the DBM that is responsible for its osteoinductivity potential. Additionally, it is unknown how osteoinductivity potential, measured by this surrogate immunoassay, will correlate with human clinical performance of the Allomatrix Putty.

- 1 Data on file at Wright Medical Technology, Inc.
- 2 Lindholm TS, Urist MR. A quantitative analysis of new bone formation by induction in compositive grafts of bone marrow and bone matrix, Clin Orthop 1980 Jul-Aug;(150):288-300.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

## AUG - 2 2004

Mr. Roger D. Brown Director, Regulatory Affairs Wright Medical Technology 5677 Airline Road Arlington, Tennessee 38002

Re: K041168

ALLOMATRIX® Putty

Regulation Number: 21 CFR 888.3045

Regulation Name: Resorbable calcium salt bone void filler devices

Regulatory Class: Class II

Product Code: MQV Dated: May 3, 2004 Received: May 4, 2004

Dear Mr. Brown:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if

applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4659. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html

Sincerely yours,

Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative and

Neurological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

# INDICATIONS FOR USE

510(K) Number (if known): <u>K04/186</u>	
Device Name: ALLOMATRIX® Putty	
Indications for Use:	
ALLOMATRIX® Putty is indicated only for bony voids or gaps that are not intrinsic to the stability of the bony structure. ALLOMATRIX® Putty is intended to be gently packed into bony voids or gaps of the skeletal system (i.e., the extremities and pelvis). These defects may be surgically created osseous defects or osseous defects created from traumatic injury to the bone.	
Prescription Use X OR Over-The Cour (Per21 CFR 801.109)  OR Optional Form	
(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)	
Concurrence of CDRH, Office of Device Evaluation (ODE)	
(Division Sign-Off) Division of General, Restorative, and Neurological Devices  510(k) Number K04 (168)	Page 1 of 1